

## Factor Leapfrog

*Factor Leapfrog* is a game to practice solving multiplication problems by breaking down one factor into easier factors.

**You need:** Transparent counters, a gameboard per player, a set of factor cards.

### To Play:

- Each player takes a gameboard.
- The factor cards are shuffled. Five cards are dealt to each player.

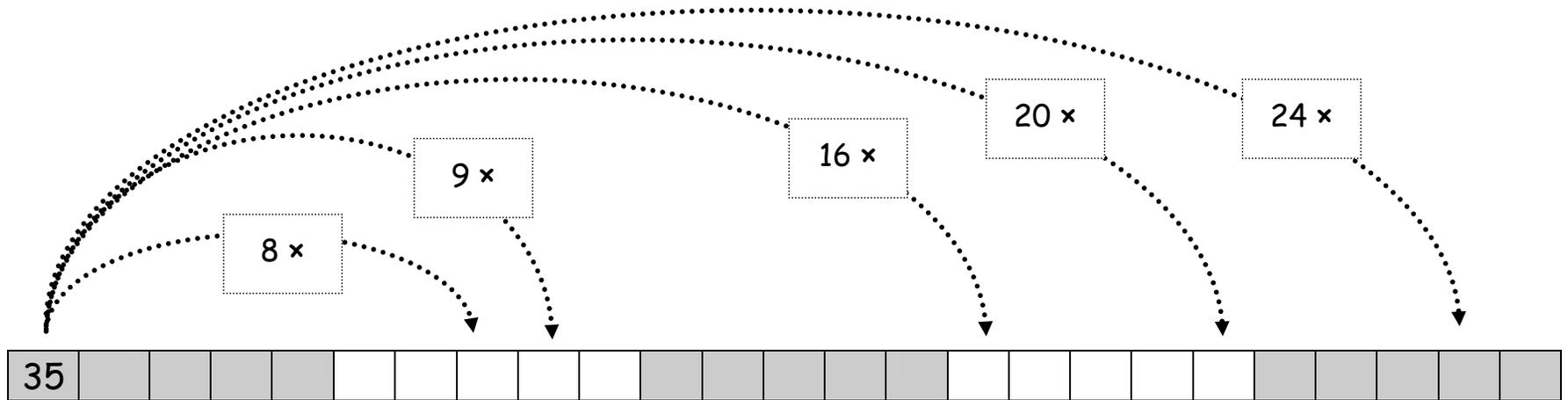
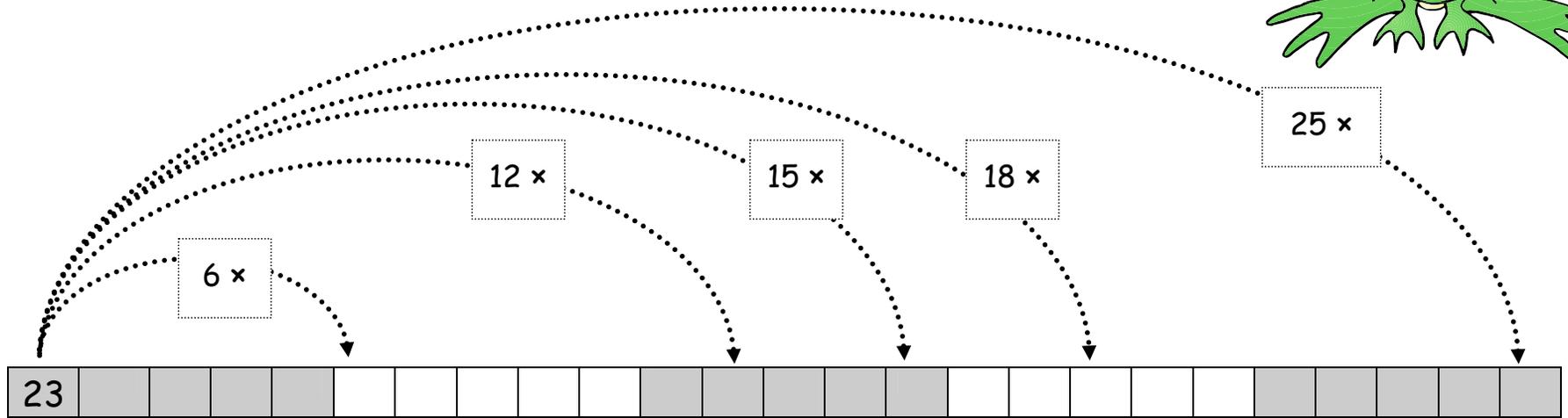
Players take turns to:

- Choose two or more factor cards that will make a factor on their board. For example, to make  $10 \times$  a player could use a  $2 \times$  card, followed by a  $5 \times$  card, or to make  $18 \times$  they could use a  $3 \times$  card, followed by a  $3 \times$  card, followed by a  $2 \times$  card.  
The order that a player uses the cards does not matter as long as they are the equivalent of multiplying by the original factor.
- They then calculate the answer using their factor cards.  
For example, to multiply  $9 \times 27$ , they go  $3 \times 27 = 81$ ,  $3 \times 81 = 243$ .  
The other players might check the calculation using their own mental strategy, e.g.  $9 \times 30 = 270$ ,  $270 - (9 \times 3) = 243$ , or they might use a calculator.
- If the player is correct they cover the box containing the original factor with a counter.
- They replenish their hand of five cards from the deck, ready for the next turn.
- If a player is not able to make one of the factors with their cards they can discard two cards and replace them from the deck. However they miss that turn.

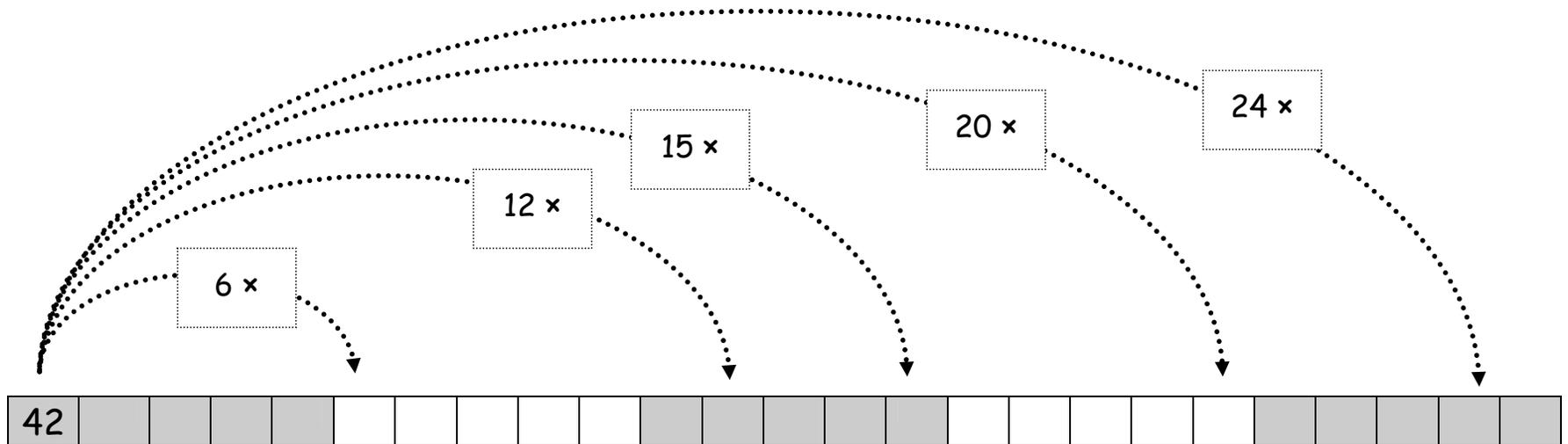
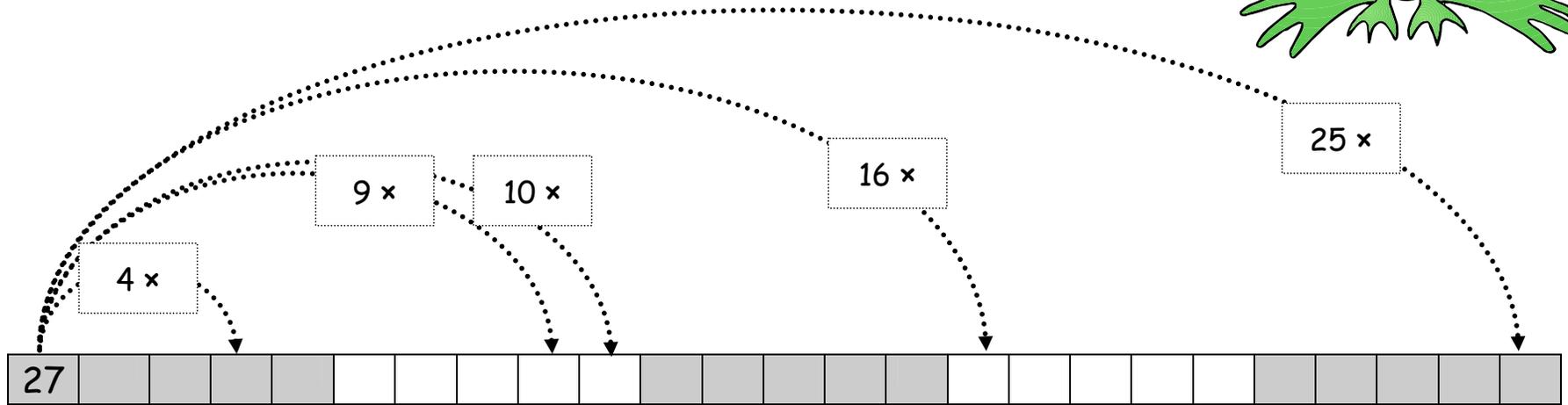
The player who covers all of their factors first is the winner.



# Factor Leapfrog

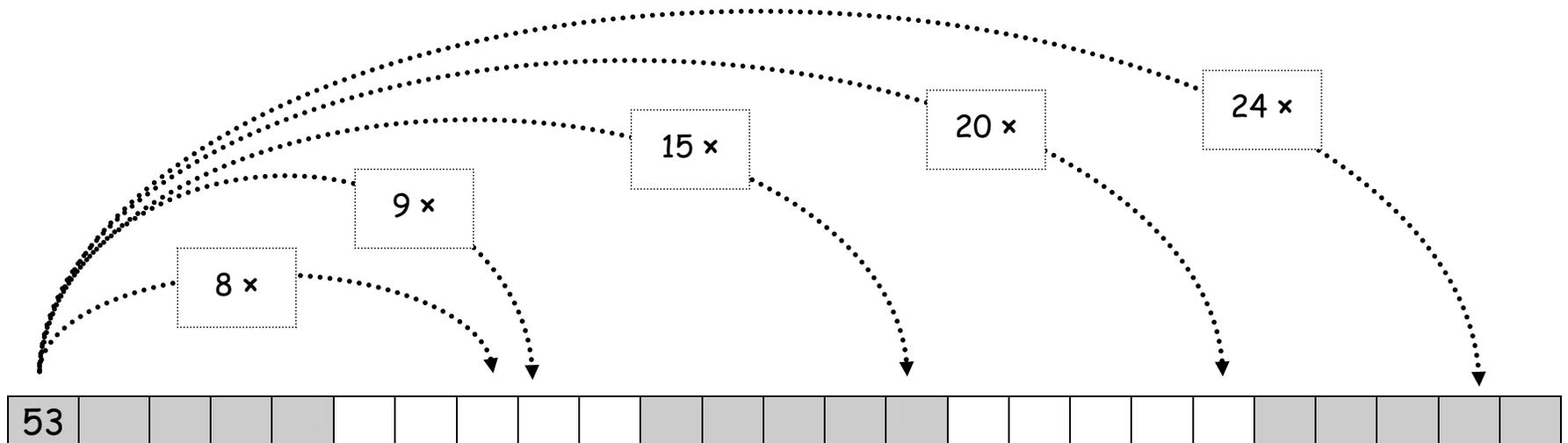
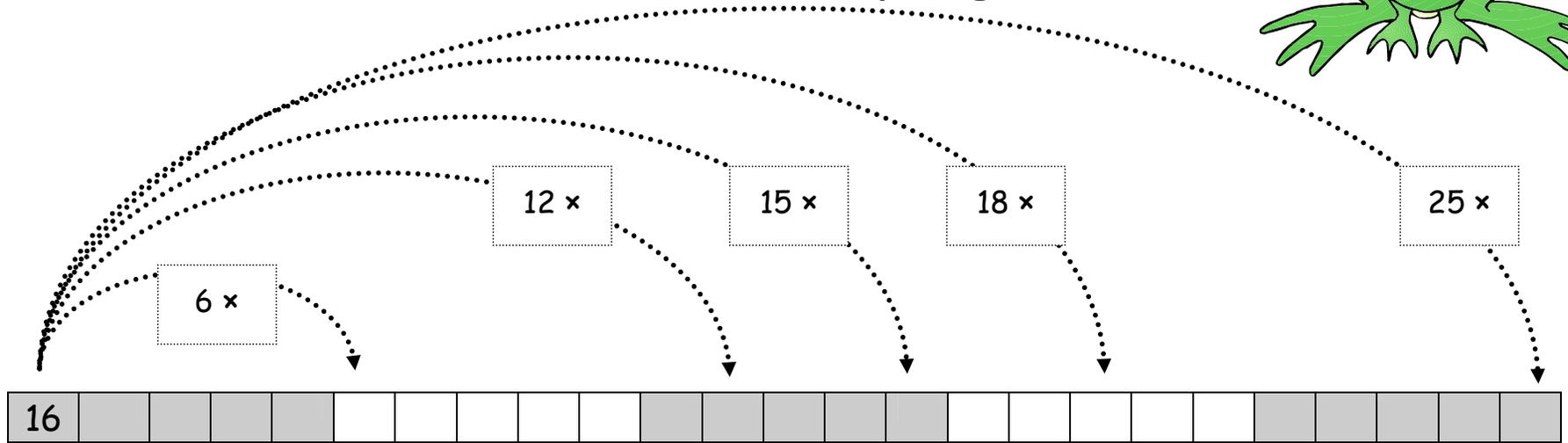


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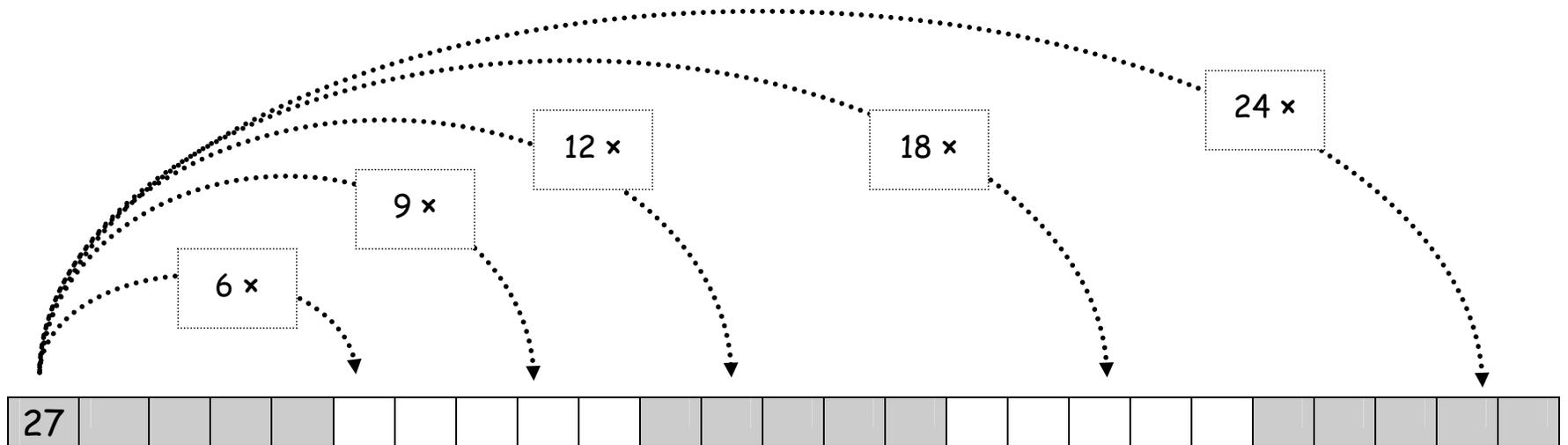
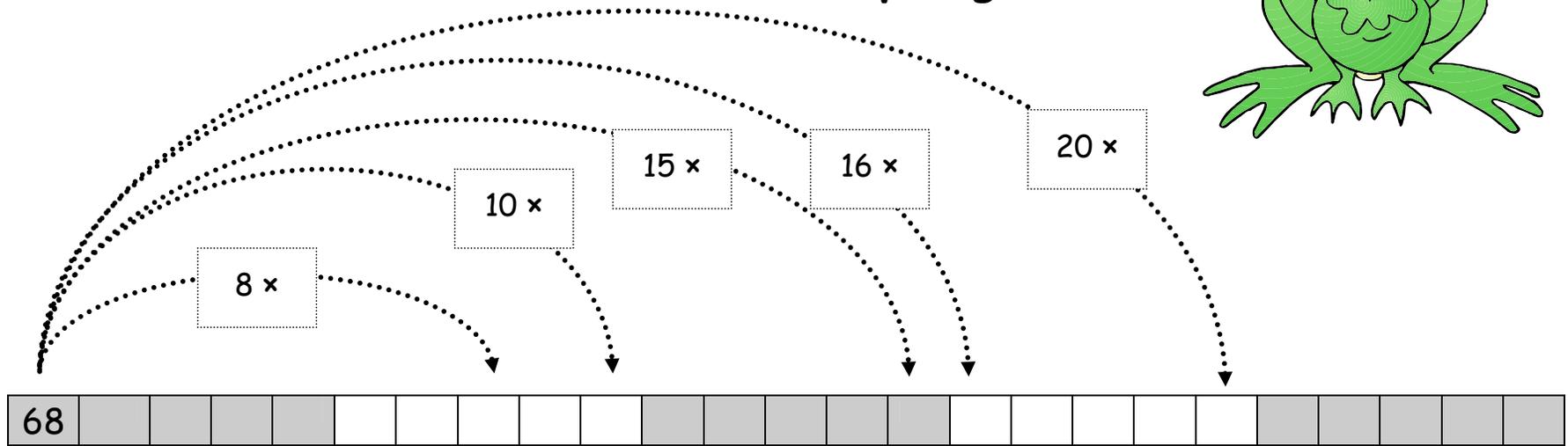
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## Factor Leapfrog

$2 \times$				
$2 \times$				
$2 \times$	$3 \times$	$3 \times$	$3 \times$	$3 \times$
$3 \times$	$3 \times$	$5 \times$	$5 \times$	$5 \times$

# Factor Leapfrog



## Factor Leapfrog

$2 \times$				
$2 \times$				
$2 \times$	$3 \times$	$3 \times$	$3 \times$	$3 \times$
$3 \times$	$5 \times$	$5 \times$	$5 \times$	$5 \times$